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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/343,165	06/29/1999	GORAN HALL	34646-00436U	7562
38065	7590	12/14/2004	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/343,165

**Applicant(s)**

HALL ET AL.

**Examiner**

Derrick W. Ferris

**Art Unit**

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6 and 11-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4-6 and 11-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 29 June 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. **Claims 1, 2, 4-6, 11-24** as amended are still in consideration for this application.

Applicant has canceled claim 3. Applicant added no new claims. Please note that applicant's status of the claims differs from the actual claims presented, see applicant's remarks on top of page 9 (i.e., claim 3 is canceled and claim 4 is amended). The actual claims always take precedence.

2. Applicant's petition to withdraw abandonment on 11/17/04 is successful.

3. Examiner **withdraws** the 112-first paragraph rejection(s) for Office action filed 3/4/2003.

4. Examiner **withdraws** the 112-second paragraph rejection(s) for Office action filed 3/4/2003. Examiner thanks applicant for making the necessary corrections to clarify the recited claimed subject matter and thus withdraws the rejection.

5. Examiner **withdraws** the obviousness rejection to *Cisco* in view of *Eastmond* for Office action 3/4/2003. A new rejection replaces the withdrawn rejection, see also comments below.

6. Examiner does **not withdraw** the obviousness rejection to *Cisco* in view of *Klemets* for Office action 3/4/2003. In addressing applicant's arguments in the response filed 11/17/2004, applicant argues communicating packet data between an external network and a mobile local area network. Examiner respectfully disagrees. In particular, *Cisco* teaches the concept of address translation between a first network and a second network, see e.g., figure 131 using a router as is known in the art. The *Cisco* reference does not clearly teach that the first network is a mobile LAN such that a mobile station is connected to said router. Examiner notes it would have been obvious to make the first network a mobile LAN such that a mobile station is

connected to the router. In particular, *Klements* teaches both a mobile LAN and router that is a mobile station (i.e., the MINT is a router and a mobile station combined). Thus *Klements* cures the above deficiency. Furthermore, since the address translation is performed at OSI layer 3 and the physical topology of the mobile LAN is at layer 1-2, examiner notes a reasonable expectation of success.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-2, 4-6, 11-18, and 19-24 as amended** are rejected under 35 U.S.C. 103(a) as being unpatentable over “Configuring Network Address Translation” by *Cisco* in view of “MINT – A Mobile Internet Router” by *Klemets et al.* (“*Klemets*”).

As to **claims 1 and 6**, shown in figure 130 of Configure Network Address Translation (herein referred to as “*Cisco*”) are two separate networks separated by a router such that one of the networks is referred to as an inside network (i.e., a wireless or mobile LAN) and the other is referred to as an outside network (i.e., an external network). Also shown in the figure is a first number of hosts in an inside network (i.e., hosts on a mobile LAN). Shown in the diagram is at least one host (e.g., host with address 1.1.1.1) sending packet data to a host located on an outside network (i.e., the external network or Internet). This packet first traverses a router where a network address translation (NAT) is performed as shown in the diagram. As this translation is

predetermined, it is inherently stored in the router. Shown is the packet being sent to host B on the external network where the translated packet has been modified with one of the globally defined addresses (e.g., the source address translated from 1.1.1.1 to 2.2.2.2).

Not shown in the figure 130 is a mobile station connected to a router. Examiner notes that using a mobile station as part of a router would have been obvious to a skilled artisan prior to applicant's invention. In other words, it would have been obvious to a skilled artisan prior to applicant's invention to attach a wireless interface to the router such that a router can communicate wirelessly with an external network such as the Internet. Examiner notes that one motivation would be that a LAN cannot be connected to the Internet via a wired (i.e., cabled) network and thus must be connected by some other means, such as a wireless network thus providing a motivation for using a wireless interface on a router in general. Examiner notes this is common in urban environments where a wide river separates one network on one side of the river with another, external network, on the other side of the river. Using this line of reasoning, examiner notes that a router (with wireless interface between the router and the Internet) is shown in figure 130 on page DC-695 where a LAN is the inside network and Host B is connected to an external network. In other words at issue between examiner and applicant with respect to applicant's figure 2 (or figure 4) and *Cisco*'s figure 130 is that applicant is attempting to claim the limitation of a wireless router as novel or unobvious since *Cisco* discloses a router capable of performing NAT between a LAN and an external network. Examiner believes this limitation would have been obvious to a skilled artisan prior to applicant's invention. By way of example, *Klemets* discloses a wireless router called a Mobile

INternet Router (MINT) as part of a wireless communication scenario shown in figure 3 on page 72. Figure 3 shows that the functionality for a wireless communication device (shows as a box with a "?") could be the same at either the base station connected to the Internet or on a mobile LAN connected with a host computer [page 71 right hand column].

Since both references disclose networking in general, and more specifically routing IP in a network, examiner notes a motivation to combine the subject matter as a whole for both references.

As to **claim 2**, shown in figure 130 is sending a data packet from host B on an external network, where the destination address 2.2.2.2, to a host on the inside network (i.e., a first of a first number of hosts) such that a network address translation is performed and the destination address is translated into a local address (i.e., the destination address is translated into 1.1.1.1).

As to **claim 4**, examiner notes that it is a matter of design choice for placing the routing and network address translation functionality such that it would have been obvious to a skilled artisan to place this functionality within a mobile phone, assuming that the mobile phone has such functionality available.

As to **claim 5**, it is well known in the art prior to applicant's invention to perform network address translation from either many-to-one or many-to-many nodes such that it would have been obvious to translate only one globally defined address. For example, *Cisco* discloses overloading an inside global address on page DC-697 and illustrated in figure 131.

As to **claims 11 and 12**, shown in figure 130 (and discussed in the rejection for claim 1) is using more than one global address. In addition, the address is maintained for a period of time disclosed on page DC-703. Also disclosed is changing the global IP address to a second global IP address after the timeout occurs.

As to **claims 13 and 14**, shown in the configurations example is directing traffic a certain way. Examiner furthermore notes that this would have been obvious to a skilled artisan as the purpose of a router is to "route" a data packet.

As to **claim 15**, see the same reasoning behind the rejection for claim 2.

As to **claim 16**, see the same reasoning behind the rejection for claim 5.

As to **claim 17**, see the same reasoning behind the rejection for claim 1. (As the table can be setup statically or maintained dynamically, some method of storing is implicitly taught by the reference.)

As to **claim 18**, see the same reasoning behind the rejection for claim 12.

As to **claim 19**, see the same reasoning behind the rejection for claim 1.

As to **claim 20**, see the same reasoning behind the rejection for claim 11.

As to **claim 21**, see the same reasoning behind the rejection for claim 12.

As to **claim 22**, see the same reasoning behind the rejection for claim 2.

As to **claim 23**, see the same reasoning behind the rejection for claim 4.

As to **claim 24**, see the same reasoning behind the rejection for claim 5.

### ***Conclusion***

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9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris  
Examiner  
Art Unit 2663

  
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